

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES DBA DART AEROSPACE. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES DBA DART AEROSPACE IS PROHIBITED.

NOTES:

1 IDENTIFY IAW MPP-120
 2 MATERIAL: 3K 2X2 TWILL CARBON FIBER PREPREG, AXIOM AX-5112T

3 MATERIAL: #120 E-GLASS EPOXY PREPREG WITH 48% RC;

4 MANUFACTURE IAW MPP-145 SECTION 5.2

5 PRIME PARTS WITH TWO COATS IAW MIL-PRF-85582C, TYPE 1, CLASS N

6 OVERALL ASSEMBLY DIMENSIONS CONTROLLED BY F/N 1 OR 2

7 PART GEOMETRY AND HOLE LOCATION DIMENSIONS CONTROLLED BY CAD MODEL.

FORMAT FILE NAME AS:
 "652.25XX(PART NUMBER) XXX(Revision Level) XXXXXXXXXXXX (PART DESCRIPTION) XX-XX-XX(DATE)"

8 OVERALL ASSEMBLY DIMENSIONS CONTROLLED BY F/N 4 OR 5

9 INSTALL F/N 11-13, AND 15 USING ADHESIVE F/N 14 CONCENTRIC TO HOLES IN F/N 1 OR 2
 PRIOR PRIMER DELTA 5

10 CURED AT 250°F WITH RAMP RATE OF 1-3 DEGREES PER MINUTE, HOLD AT 250°F FOR 60 MINUTES

11 ZERO DEGREE WARP DIRECTION LISTED ON CORRESPONDING PART DRAWINGS

12 INSPECT IAW XXXXX (TBD)

13 INSPECT DIAMETERS ON ALL HOLES

14 MATERIAL:AR 4315HP ADHESIVE, RESINLAB L.L.C

15 MAX WEIGHT: TBD

16 MAX WEIGHT: TBD

17 MAX WEIGHT: TBD

18 APPLY PLY G1 ONLY WHERE SHOWN

19 APPLY PLY G2 ONLY WHERE SHOWN

20 APPLY MINIMUM 2.00 X 2.00 SQUARES AROUND HOLE LOCATIONS SHOWN. 2.00 WIDE STRIPS ALLOWED TO STRETCH BETWEEN HOLES THAT ARE LESS THEN 3.00 APART.

21 APPLY MINIMUM 3.00 X 3.00 SQUARES AROUND HOLE LOCATIONS SHOWN. 3.00 WIDE STRIPS ALLOWED TO STRETCH BETWEEN HOLES THAT ARE LESS THEN 2.00 APART.

22 LAYER THICKNESS TO TRANSITION OVER 1.00-1.50 IN

23 DATUM D IS A POINT

24 ADHERE OUTSIDE BODY/FLANGE OF F/N 8 TO F/N 5 AND F/N 6 USING ADHESIVE F/N 14

25 THICKNESS CALLOUT IS FOR COVER DOOR FLANGE GEOMETRY ONLY

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
	LAST PROTOTYPE RELEASE: PR16		
N/C	INITIAL RELEASE	01-13-21	J. GARDINER
A	INCORPORATED ECN 06711	05-31-21	J. GARDINER
B	INCORPORATED ECN 06733	07-06-21	for P. BRAVO

T-6

		8	8	16	601.4391	RIVET	CCR274SS3-05	
2	2			15	654.7026	FLANGE DOUBLER (AFT)		
A/R	A/R			14	600.1005	ADHESIVE	△4	
2	2			13	654.7019	5 HOLE DOUBLER (AFT)		
2	2			12	654.7018	4 HOLE DOUBLER (AFT)		
4	4			11	654.7017	2 HOLE DOUBLER (AFT)		
		2	2	10	649.4011	WIRE TAB		
		1	1	9	601.1983	RIVET	CCR274SS3-03	
		4	4	8	601.3810	CAMLOC STUD		
		4	4	7	601.3713	QUARTER TURN RECEPTACLE		
				1	652.2515	AFT COVER DOOR LH	△2△3△5△7	
				1	652.2514	AFT COVER DOOR RH	△3△5△7△8	
				1	652.2513	AFT COVER LH	△2△3△5△7△8	
				1	652.2512	AFT COVER RH	△2△3△5△7△8	
		1		2	652.2511	AFT POD LH	△2△3△5△7△8	
		1		1	652.2510	AFT POD RH	△2△3△5△7△8	
	x				652.2504	AFT POD ASSEMBLY RH		
	x				652.2503	AFT POD ASSEMBLY LH		
		x		x	652.2502	AFT COVER ASSEMBLY RH		△6△1△
					652.2501	AFT COVER ASSEMBLY LH		△6△1△
2504	2503	2502	2501	FIND #	PART #	DESCRIPTION	MAT'L	SPEC.

QTY		PARTS LIST	
ORIGINAL DATE (MO-DA-YR)	11-09-20	NEXT ASSY (S)	
DRAWN BY EAN	Z. MUTTER	652.2300	
DRAWING APPROVAL J. GARDINER 01-13-21	CONTRACT No.		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ± .5°			
SIZE	CAGE CODE	DWG. NO.	REV.
B	07MZ6	652.2500	B
SCALE	NONE	SHEET	1 OF 11

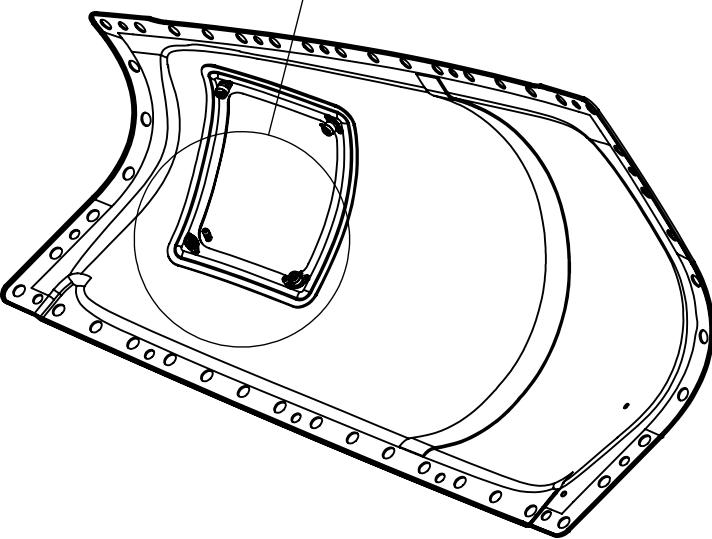
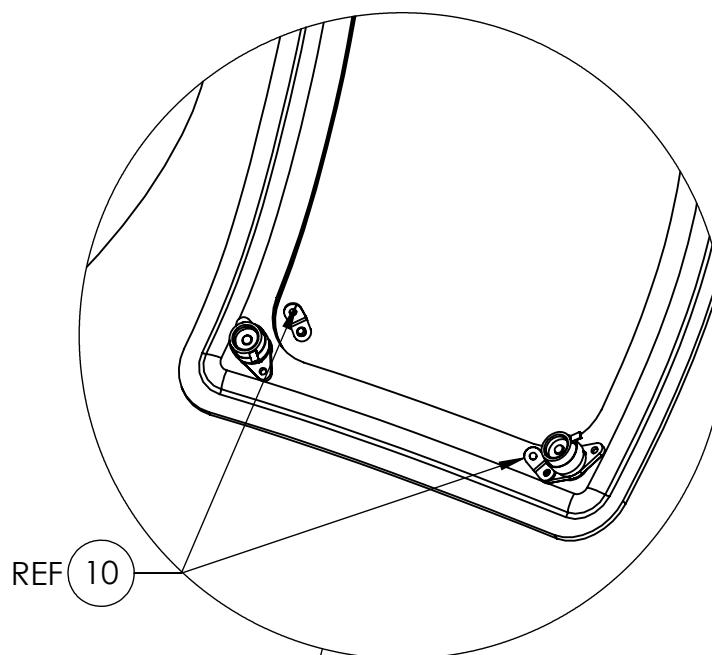
DART
AEROSPACE
3030 ENTERPRISE CT.,
SUITE A,
VISTA, CA. 92081
(760)-724-5300
APICAL INDUSTRIES, INC.
dba DART AEROSPACE

AW169 AFT POD AND COVER

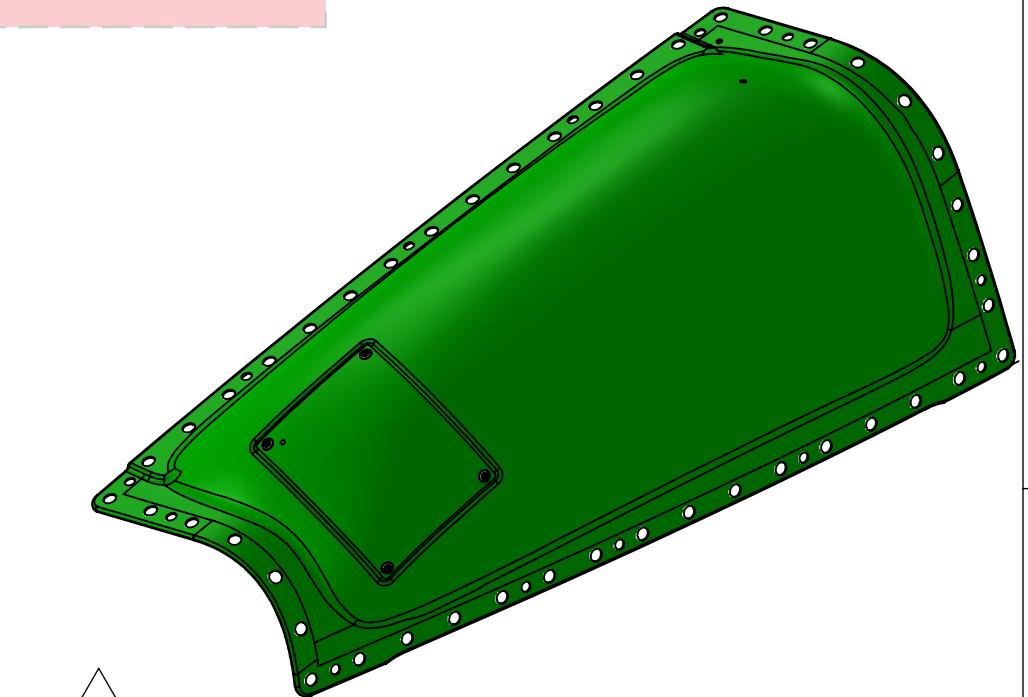
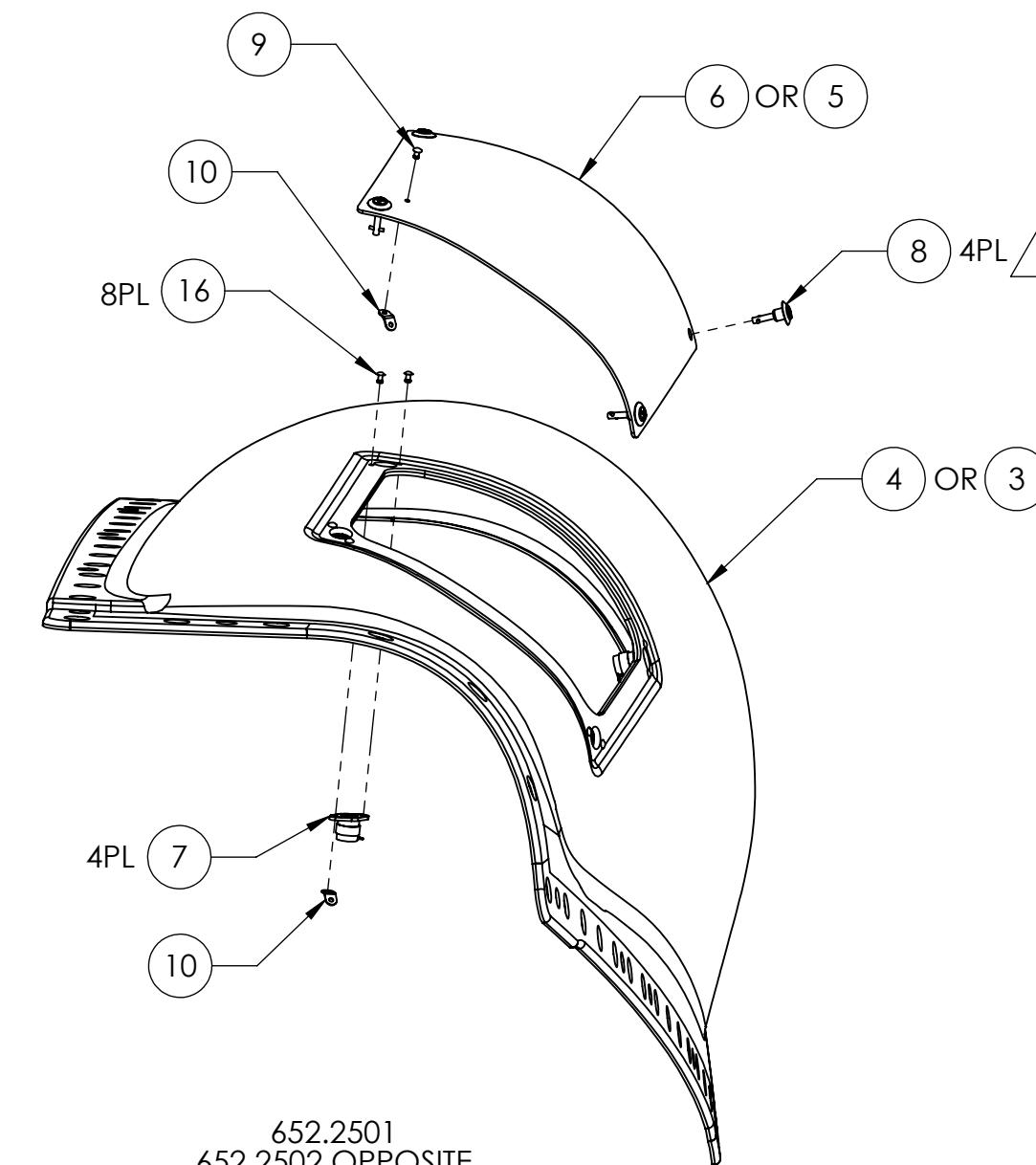
SIZE CAGE CODE DWG. NO. REV.
B 07MZ6 652.2500 B
SCALE NONE SHEET 1 OF 11

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A



652.2501
652.2502 OPPOSITE



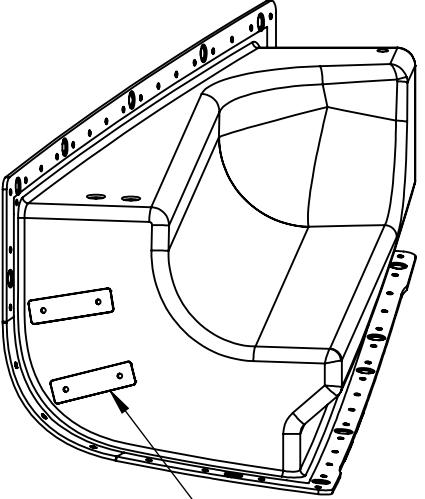
652.2501
652.2502 OPPOSITE

ORIGINAL DATE (MO-DA-YR)	11-09-20	DART AEROSPACE 3030 ENTERPRISE CT., SUITE A, VISTA, CA. 92081 (760)-724-5300 APICAL INDUSTRIES, INC. dba DART AEROSPACE	
DRAWN BY	CHECKER		
EAN	Z. MUTTER		
DRAWING APPROVAL	J. GARDNER		
01-13-21 CONTRACT No.			
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SIZE	CAGE CODE	DWG. NO.	
B	07MZ6	652.2500	
REV.		B	
SCALE	NONE	HEET 2 OF 11	

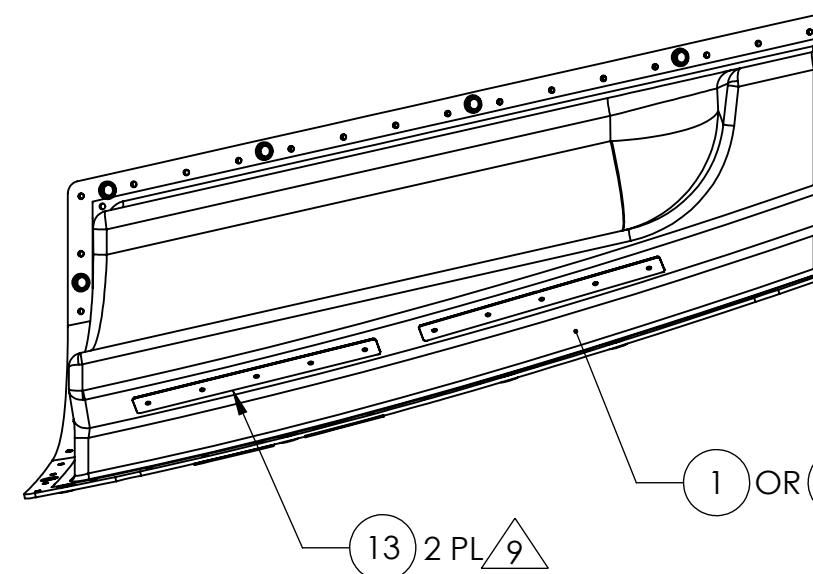
AW169 AFT POD AND COVER

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A

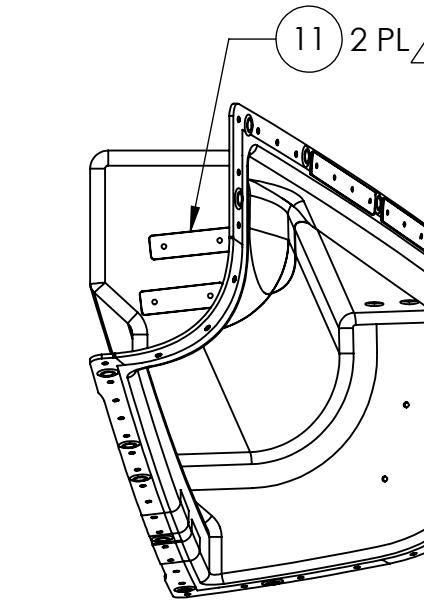


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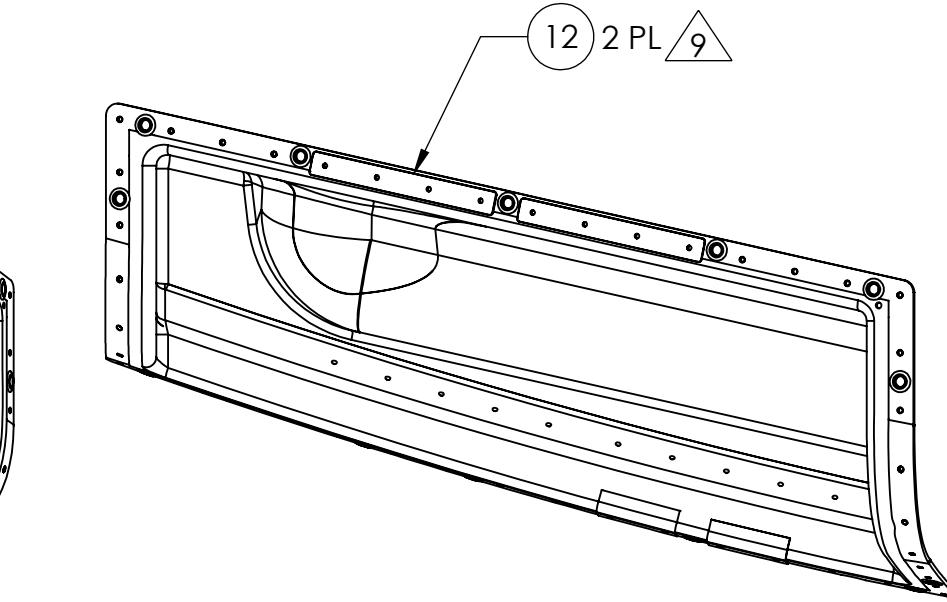


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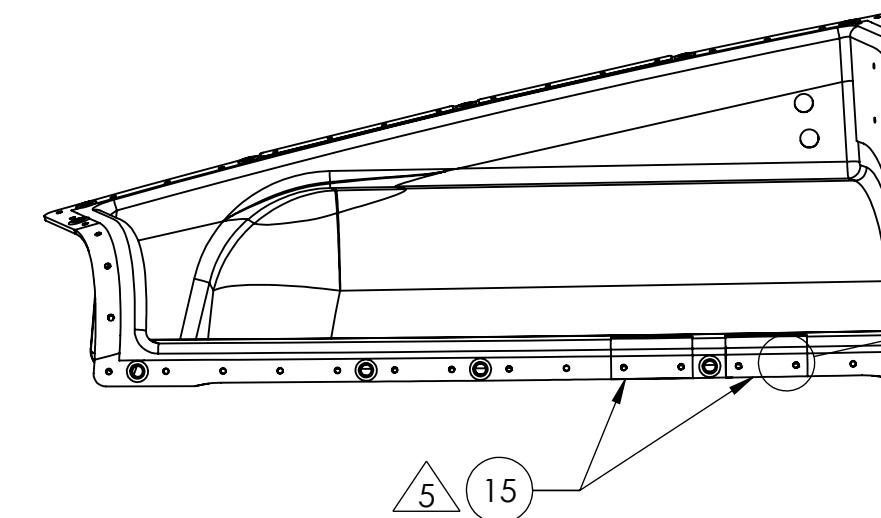
1 OR 2



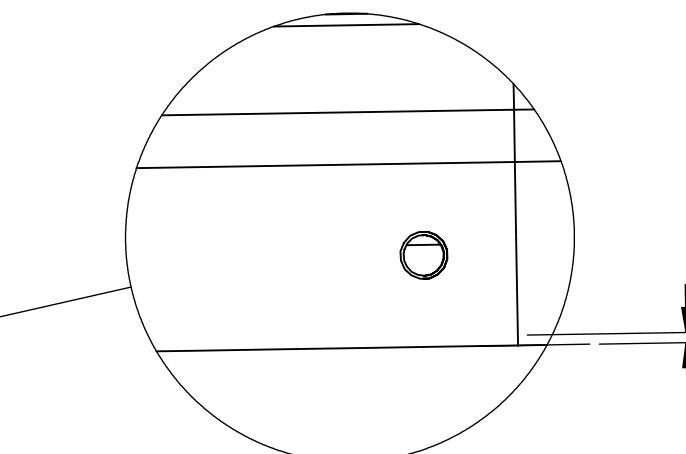
11 2 PL 9



12 2 PL 9



5 15



TYPICAL DOUBLER INSTALLATION

DART
AEROSPACE 3030 ENTERPRISE CT.,
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(760)-724-5300

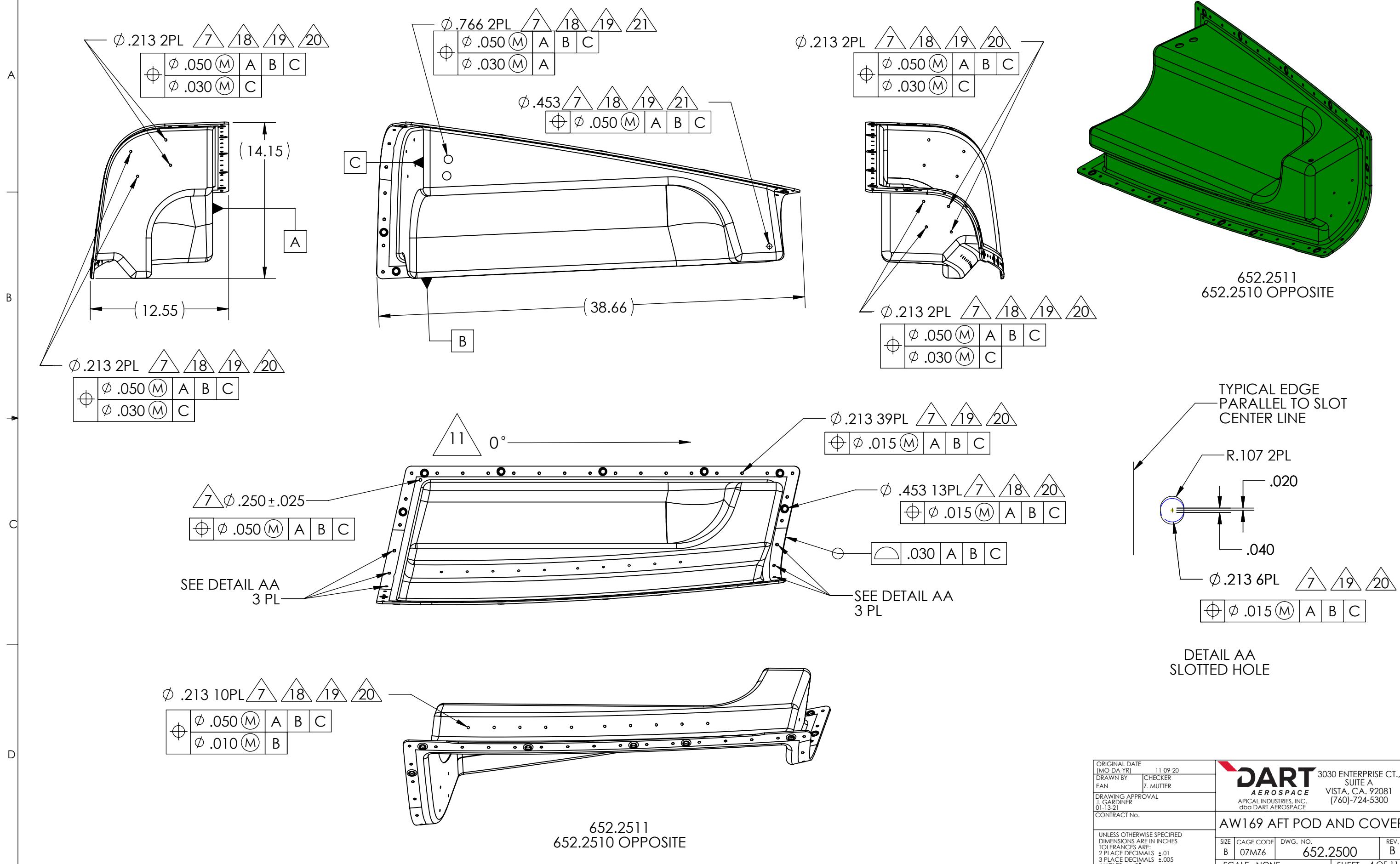
ORIGINAL DATE
(MO-DA-YR) 11-09-20
DRAWN BY CHECKER
EAN Z. MUTTER
DRAWING APPROVAL
J. GARDNER
01-13-21
CONTRACT No.
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
2 PLACE DECIMALS $\pm .01$
3 PLACE DECIMALS $\pm .005$
ANGLES $\pm .5^\circ$

3030 ENTERPRISE CT.,
SUITE A,
VISTA, CA. 92081
(760)-724-5300

AW169 AFT POD AND COVER
SIZE CAGE CODE DWG. NO. REV.
B 07MZ6 652.2500 B
SCALE NONE SHEET 3 OF 11

652.2503.SHOWN
652.2504 OPOSITE

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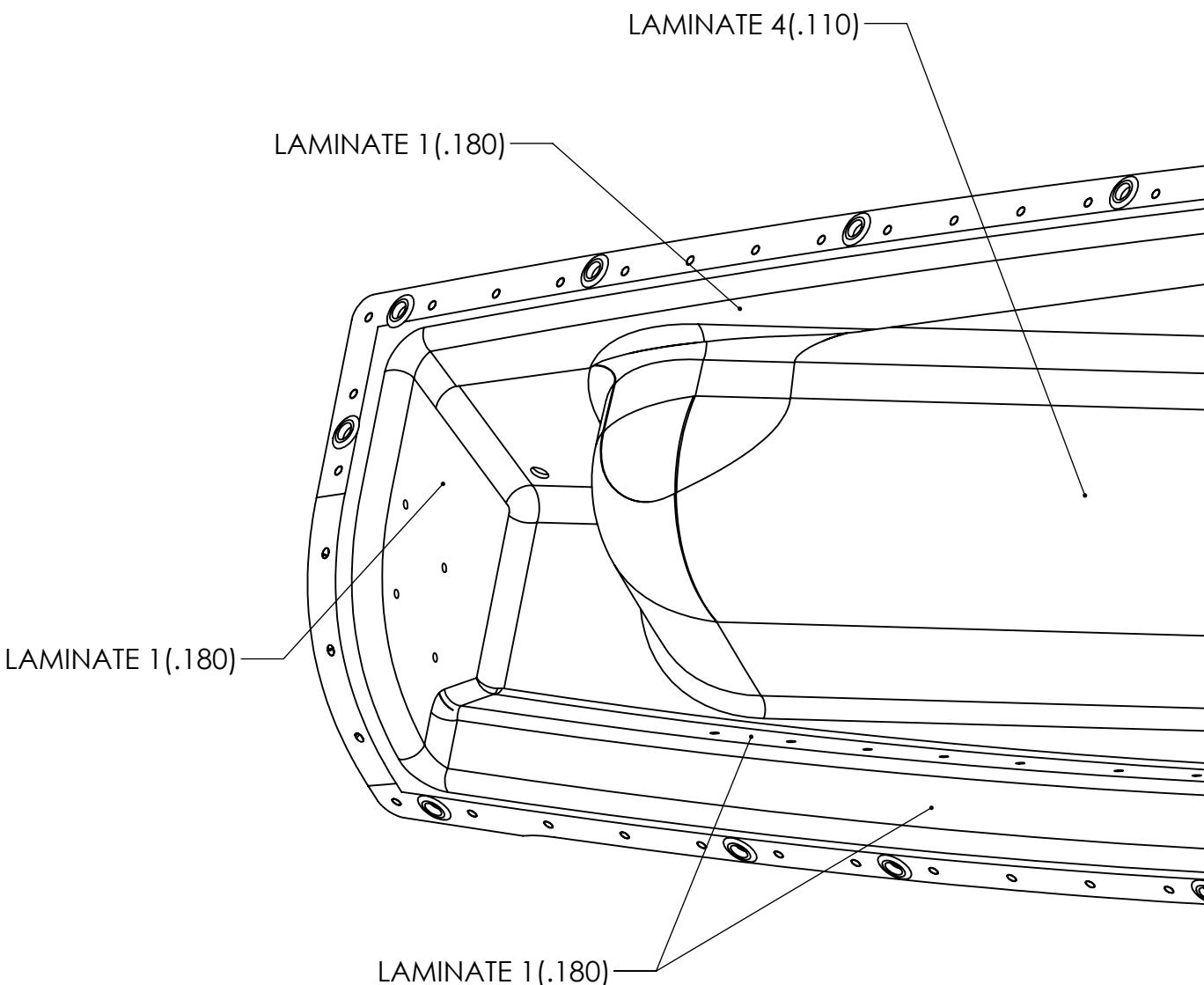
APICAL INDUSTRIES, INC.
dba DART AEROSPACE

AW169 AFT POD AND COVER

652.2500

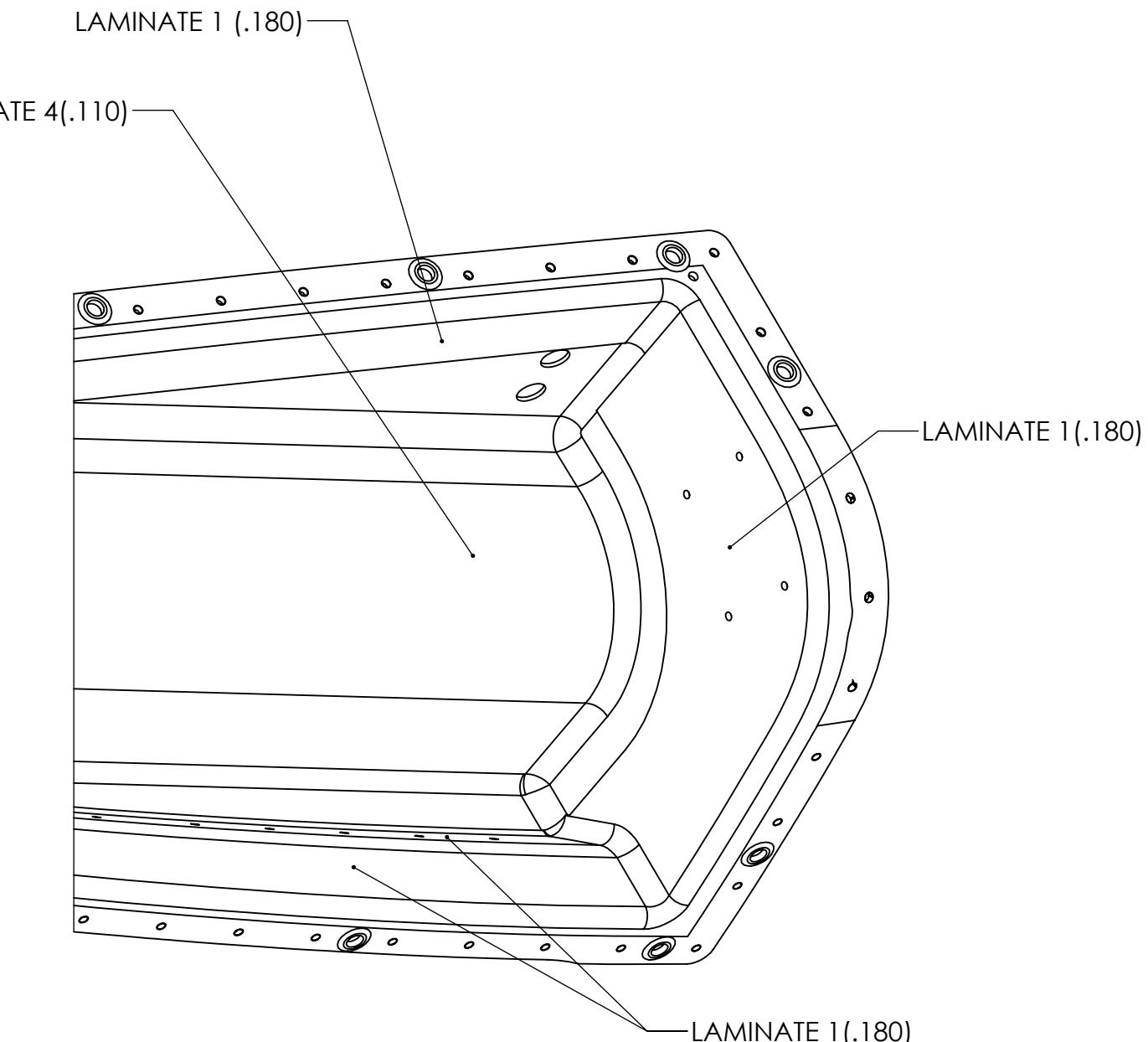
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A



652.2511, 652.2510 OPPOSITE
LAYER MAP AFT END  22

B



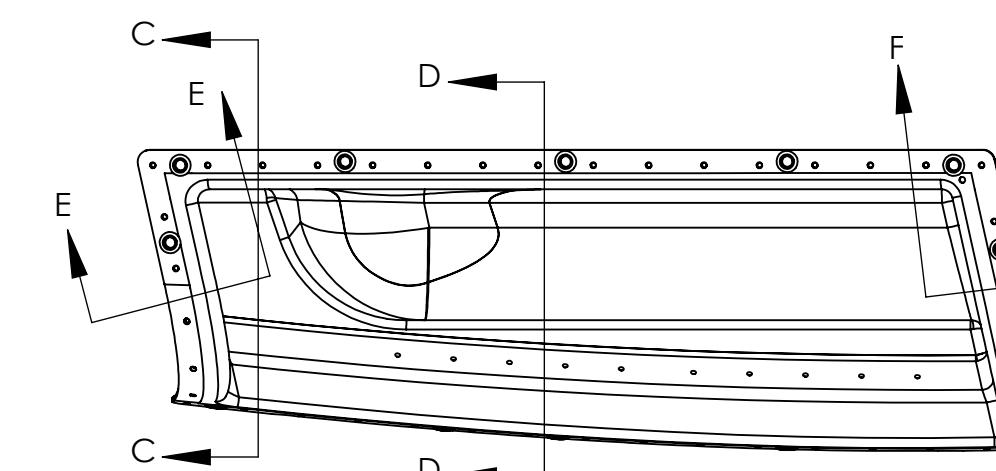
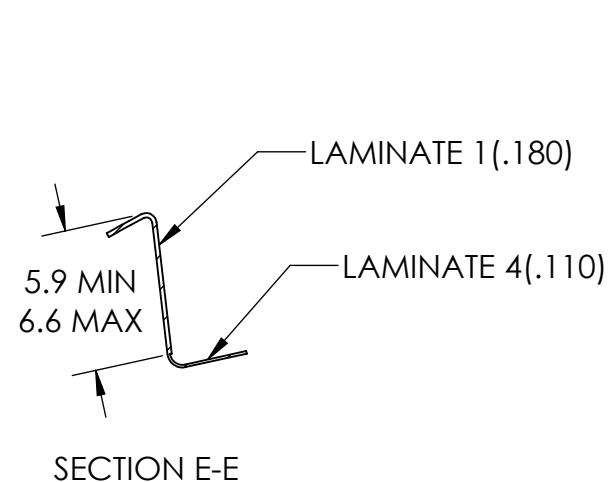
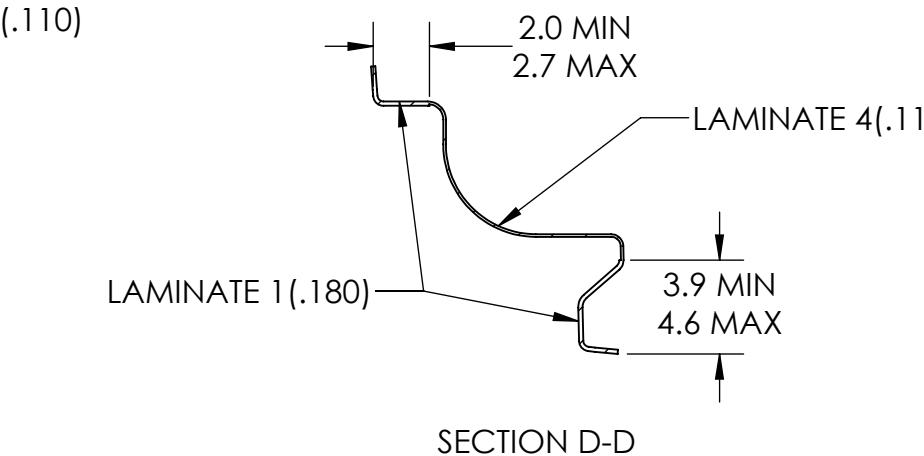
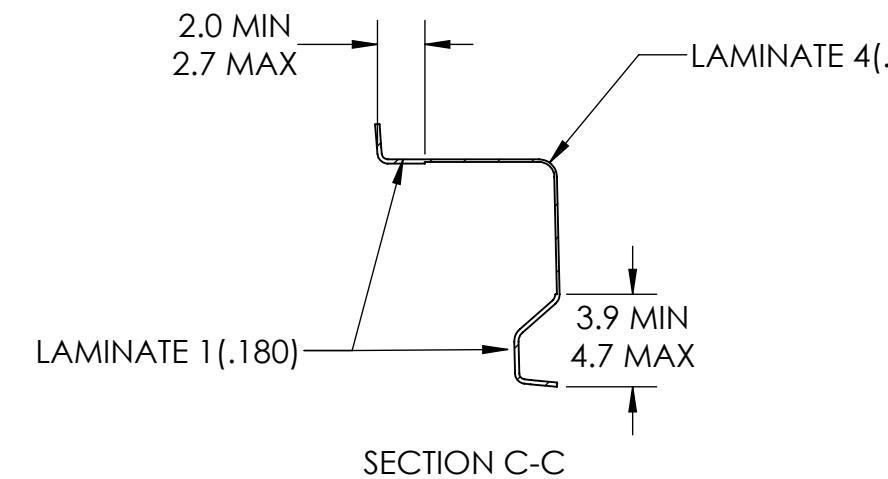
652.2511, 652.2510 OPPOSITE
LAYER MAP FWD END  22

C

D

ORIGINAL DATE (MO-DA-YR)	11-09-20	 DART AEROSPACE	3030 ENTERPRISE CT., SUITE A, VISTA, CA. 92081 (760)-724-5300 APICAL INDUSTRIES, INC. dba DART AEROSPACE		
DRAWN BY	CHECKER				
EAN	Z. MUTTER				
DRAWING APPROVAL	J. GARDNER 01-13-21				
CONTRACT No.					
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS $\pm .01$ 3 PLACE DECIMALS $\pm .005$ ANGLES $\pm .5^\circ$					
SIZE	CAGE CODE	DWG. NO.	REV.		
B	07MZ6	652.2500	B		
SCALE NONE		SHEET 5 OF 11			

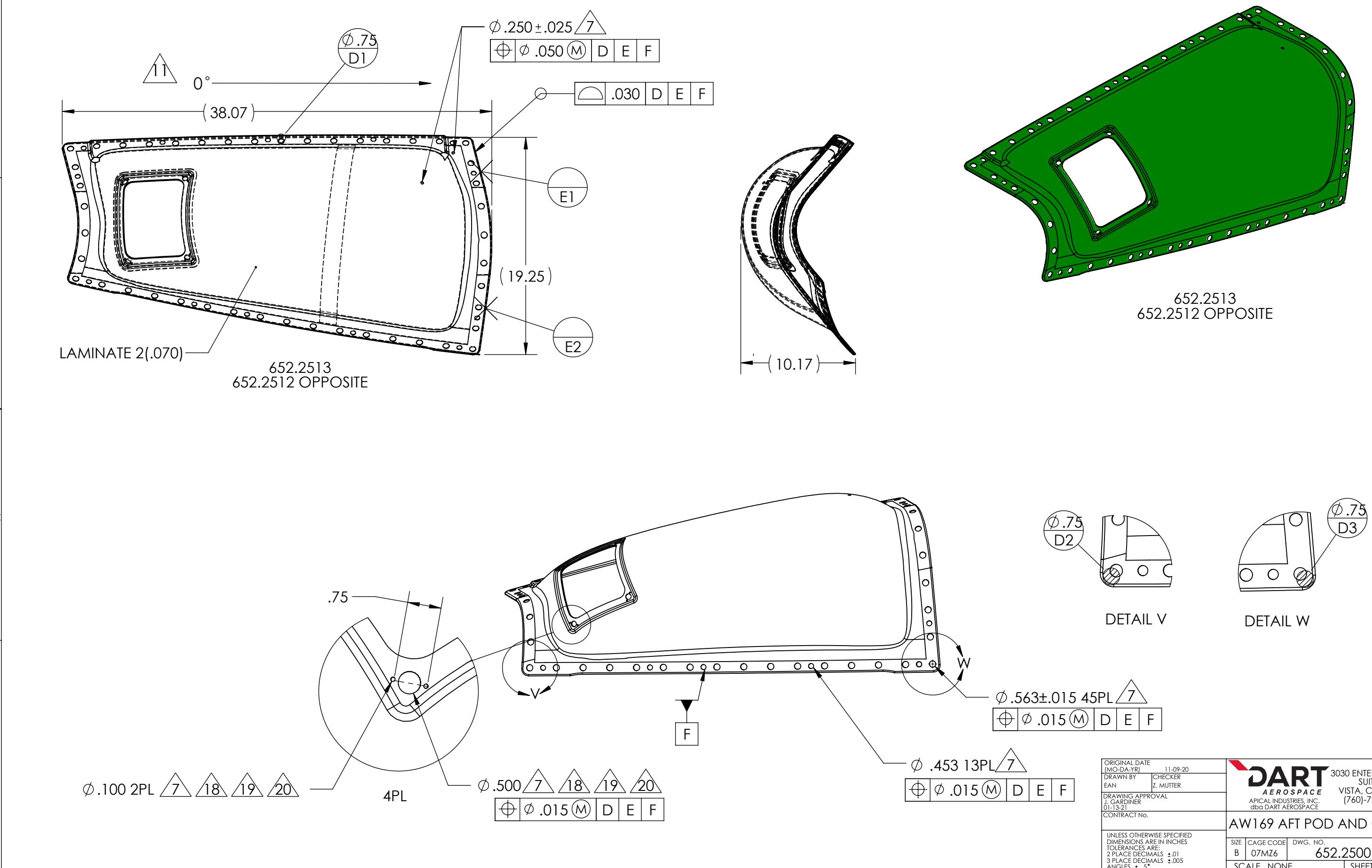
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652.2511, 652.2510 OPPOSITE
LAYER CROSS SECTIONS 

ORIGINAL DATE (MO-DA-YR)	11-09-20	 3030 ENTERPRISE CT., SUITE A, VISTA, CA. 92081 (760)-724-5300 APICAL INDUSTRIES, INC. dba DART AEROSPACE	
DRAWN BY	CHECKER		
EAN	Z. MUTTER		
DRAWING APPROVAL	J. GARDNER		
01-13-21			
CONTRACT No.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS $\pm .01$ 3 PLACE DECIMALS $\pm .005$ ANGLES $\pm .5^\circ$			
SIZE	CAGE CODE	DWG. NO.	
B	07MZ6	652.2500	
REV.		B	
SCALE	NONE	HEET 6 OF 11	

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ORIGINAL DATE 11-09-20
 DRAWN BY CHECKER
 EAN Z. MUTTER
 DRAWING APPROVAL
 J. GARDNER 01-13-21
 CONTRACT No.

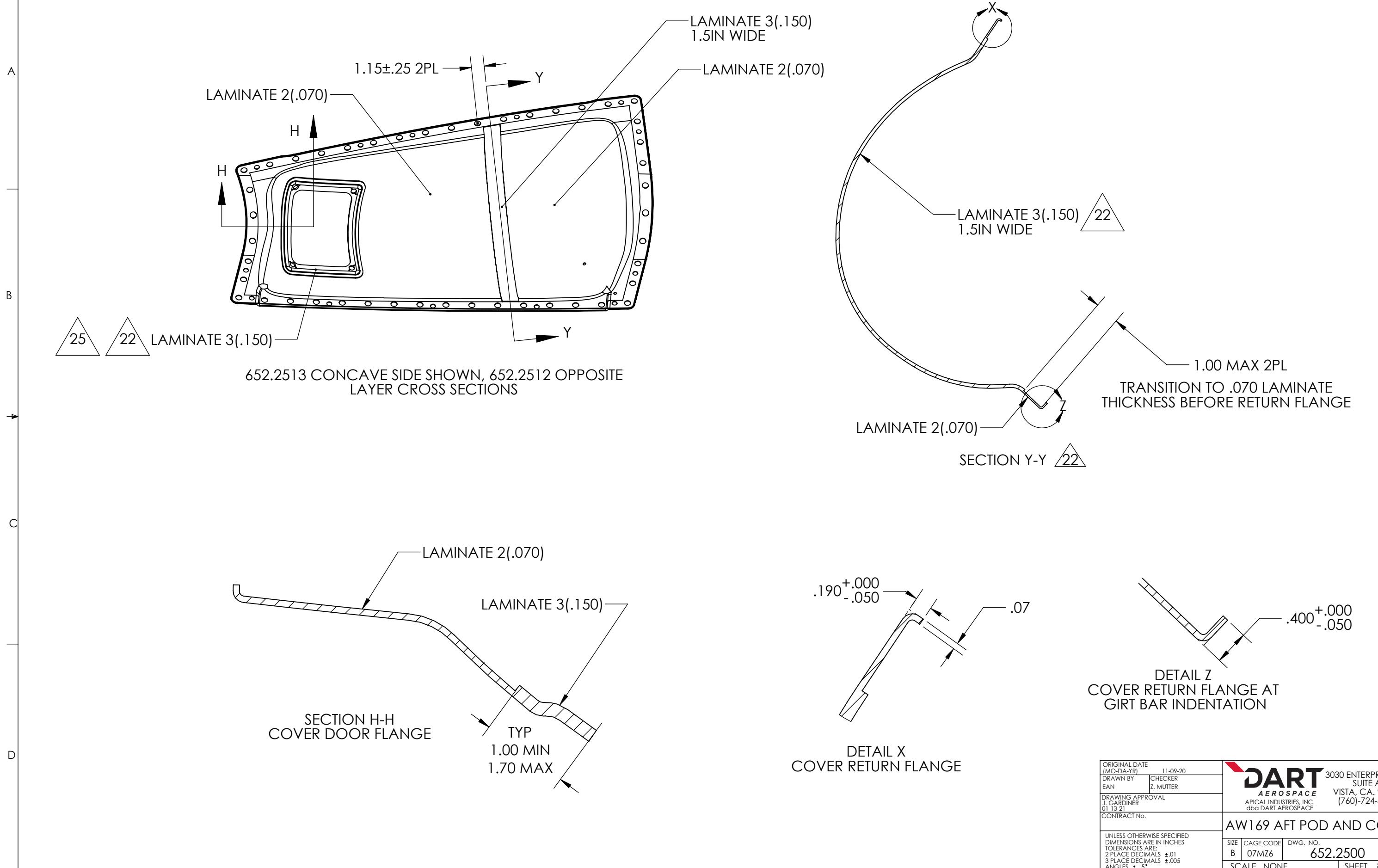
DART
 AEROSPACE 3030 ENTERPRISE CT.,
 SUITE A,
 VISTA, CA. 92081
 (760)-724-5300
 APICAL INDUSTRIES, INC.
 dba DART AEROSPACE

AW169 AFT POD AND COVER

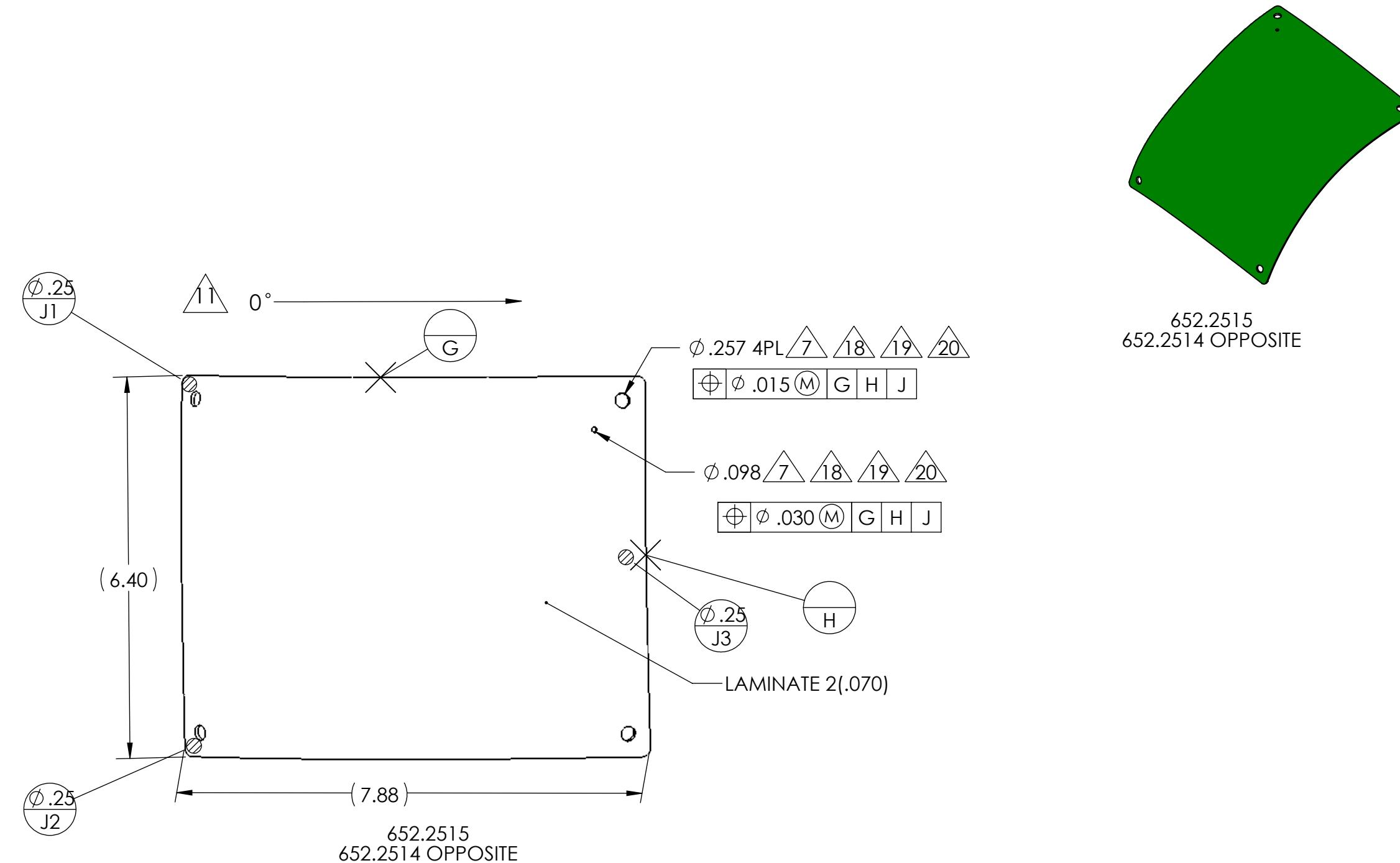
SIZE	CAGE CODE	DWG. NO.	REV.
B	07MZ6	652.2500	B
SCALE NONE			
SHEET 7 OF 11			

UNLESS OTHERWISE SPECIFIED
 DIMENSIONS ARE IN INCHES
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 ANGLES $\pm .5^\circ$

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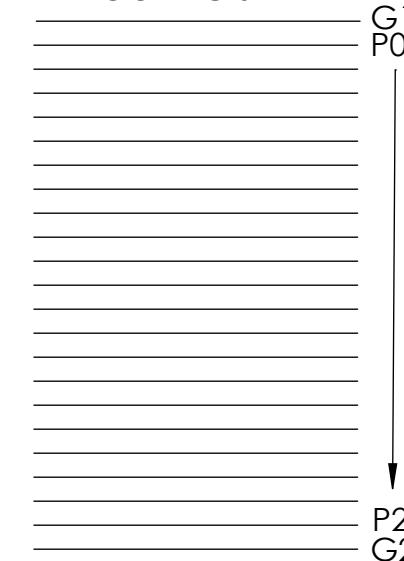
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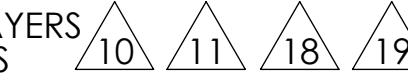
ORIGINAL DATE (MO-DA-YR)	11-09-20	DART AEROSPACE	3030 ENTERPRISE CT., SUITE A, VISTA, CA. 92081 (760)-724-5300
DRAWN BY	CHECKER		
EAN	Z. MUTTER		
DRAWING APPROVAL	J. GARDNER		01-13-21
CONTRACT No.			
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SIZE	CAGE CODE	DWG. NO.	REV.
B	07MZ6	652.2500	B
SCALE	NONE	9 OF 11	

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TOOLING SIDE



LAYUP OF PREPREG LAYERS
.180^{+.050}_{-.010} THICKNESS

LAMINATE 1 - .180in^{+.050}_{-.010} OVERALL THICKNESS

PLY	WARP ANGLE	MATERIAL	THICKNESS
G1	N/A	3	.008-.010
P01	0	2	.008-.010
P02	+45	2	.008-.010
P03	-45	2	.008-.010
P04	90	2	.008-.010
P05	+45	2	.008-.010
P06	-45	2	.008-.010
P07	0	2	.008-.010
P08	+45	2	.008-.010
P09	-45	2	.008-.010
P10	90	2	.008-.010
P11	0	2	.008-.010
P12	90	2	.008-.010
P13	-45	2	.008-.010
P14	+45	2	.008-.010
P15	0	2	.008-.010
P16	-45	2	.008-.010
P17	+45	2	.008-.010
P18	90	2	.008-.010
P19	-45	2	.008-.010
P20	+45	2	.008-.010
P21	0	2	.008-.010
G2	N/A	3	.008-.010

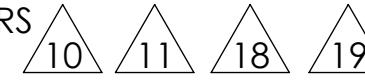
18

19

TOOLING SIDE



LAYUP OF PREPREG LAYERS
0.070^{+.030}_{-.015} THICKNESS

LAMINATE 2 - .07in^{+.030}_{-.015} OVERALL THICKNESS

PLY	WARP ANGLE	MATERIAL	THICKNESS
G1	N/A	3	.008-.010
P01	0	2	.008-.010
P02	+45	2	.008-.010
P03	-45	2	.008-.010
P04	90	2	.008-.010
P05	+45	2	.008-.010
P06	-45	2	.008-.010
P07	0	2	.008-.010
G2	N/A	3	.008-.010

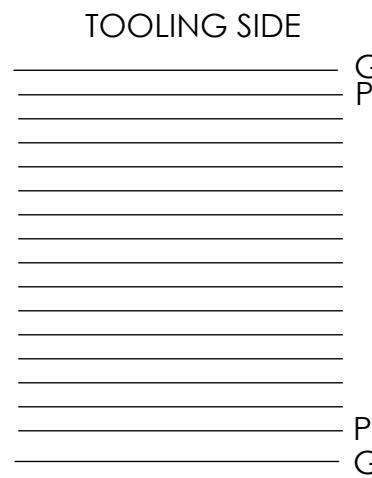
18

19

ORIGINAL DATE (MO-DA-YR)	11-09-20			
DRAWN BY	CHECKER			
EAN	Z. MUTTER			
DRAWING APPROVAL				
J. GARDNER				
01-13-21				
CONTRACT No.				
DART AEROSPACE				
3030 ENTERPRISE CT., SUITE A, VISTA, CA. 92081 (760)-724-5300				
APICAL INDUSTRIES, INC. dba DART AEROSPACE				
AW169 AFT POD AND COVER				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS $\pm .01$ 3 PLACE DECIMALS $\pm .005$ ANGLES $\pm .5^\circ$	SIZE	CAGE CODE	DWG. NO.	REV.
	B	07MZ6	652.2500	B
SCALE	NONE	10 OF 11		

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A



B

LAYUP OF PREPREG LAYERS
.150^{+.030}_{-.030} THICKNESS

10 11 18 19

C

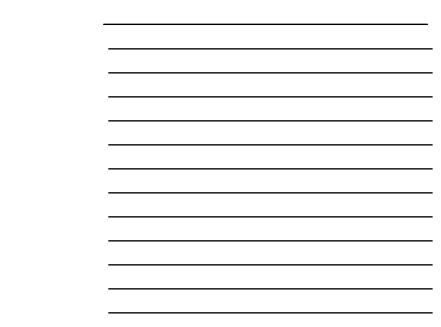
LAMINATE 3 - .150in ^{+.030} _{-.030} OVERALL THICKNESS			
PLY	WARP ANGLE	MATERIAL	THICKNESS
G1	N/A	3	.008-.010
P01	0	2	.008-.010
P02	+45	2	.008-.010
P03	-45	2	.008-.010
P04	90	2	.008-.010
P05	+45	2	.008-.010
P06	-45	2	.008-.010
P07	0	2	.008-.010
P08	90	2	.008-.010
P09	0	2	.008-.010
P10	-45	2	.008-.010
P11	+45	2	.008-.010
P12	90	2	.008-.010
P13	-45	2	.008-.010
P14	+45	2	.008-.010
P15	0	2	.008-.010
G2	N/A	3	.008-.010

D

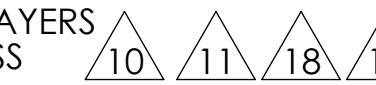
18

19

TOOLING SIDE



LAYUP OF PREPREG LAYERS
.110^{+.030}_{-.025} THICKNESS



LAMINATE 4 - .110in^{+.030}_{-.025} OVERALL THICKNESS

PLY	WARP ANGLE	MATERIAL	THICKNESS
G1	N/A	3	.008-.010
P01	0	2	.008-.010
P02	+45	2	.008-.010
P03	-45	2	.008-.010
P04	90	2	.008-.010
P05	+45	2	.008-.010
P06	-45	2	.008-.010
P07	0	2	.008-.010
P08	+45	2	.008-.010
P09	-45	2	.008-.010
P10	90	2	.008-.010
P11	0	2	.008-.010
G2	N/A	3	.008-.010

18

19

ORIGINAL DATE (MO-DA-YR)	11-09-20
DRAWN BY	CHECKER
EAN	Z. MUTTER
DRAWING APPROVAL	
J. GARDNER 01-13-21	
CONTRACT No.	

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AW169 AFT POD AND COVER

SIZE	CAGE CODE	DWG. NO.	REV.
B	07MZ6	652.2500	B
SCALE NONE		SHEET 11 OF 11	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
2 PLACE DECIMALS $\pm .01$
3 PLACE DECIMALS $\pm .005$
ANGLES $\pm .5^\circ$